Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition	Erro rs
1 BRS	L5	9	collaborative adj design	USPAT; EPO	2001/02/21 16:03			0
2 BRS	L6	2	fabricator adj selection	USPAT; EPO	2001/02/21 16:03			0
3 BRS	L8	0	fabricator near (data adj base)	USPAT; EPO	2001/02/21 16:05			0
4 BRS	L9	0	fabricator near2 (data adj base)	USPAT; EPO	2001/02/21 16:05			0
5 BRS	L10	0	fabricator same (data adj base)	USPAT; EPO	2001/02/21 16:06			0

	Document ID	Source	Issue Date	Pages	Title	Current OR Retrieval Classif
1	US 5966310 A	USPAT	19991012	30	Personal design system and personal equipment production system for actually producing equipment having designed appearance	345/334
2	US 5956708 A	USPAT	19990921	26	Integration of link generation, cross-author user navigation, and reuse identification in authoring process	707/3
3	US 5940082 A	USPAT	19990817	24	System and method for distributed collaborative drawing	345/442
4	US 5905507 A	USPAT	19990518	29	Compression of geometric models using spanning trees	345/440
5	US 5825369 A	USPAT	19981020	30	Compression of simple geometric models using spanning trees	345/440
6	US 5784570 A	USPAT	19980721	9	Server for applying a recipient filter and compressing the input data stream based upon a set of at least one characteristics in a multiuser interactive virtual environment	709/247
7	US 5680530 A	USPAT	19971021	20	Graphical environment for interactively specifying a target system	345/440
8	US 5563988 A	USPAT	19961008	132	Method and system for facilitating wireless, full-body, real-time user interaction with a digitally represented visual environment	345/421
9	US 5541849 A	USPAT	19960730	46	Method and system for creating and validating low level description of electronic design from higher level, behavior-oriented description, including estimation and comparison of timing parameters	716/18

Current XRef	Inventor	U	S	C	P	1
1	700/118 ; 700/97 ; 706/919	Maeda, Tsuyoshi , et al.	☐	☒	☐	☐	☐
2	707/100 ; 707/501 ; 707/511	Dyko, Denise Y. , et al.	☒	☐	☐	☐	☐
3		Brinegar, David , et al.	☒	☐	☐	☐	☐
4		Rossignac, Jarek Jaroslaw Roman , et al.	☒	☐	☐	☐	☐
5		Rossignac, Jarek Jaroslaw Roman , et al.	☒	☐	☐	☐	☐
6	341/51 ; 348/14.13 ; 348/402.1 ; 348/413.1 ; 382/107 ; 382/232 ; 709/200 ; 709/203 ; 709/235 ; 709/246	Funkhouser, Thomas A.	☒	☐	☐	☐	☐
7	345/335 ; 345/349	Selfridge, Peter Gilman , et al.	☒	☐	☐	☐	☐
8	345/473	Maes, Pattie E. , et al.	☐	☒	☐	☐	☐
9	716/19 ; 716/5	Rostoker, Michael D. , et al.	☐	☒	☐	☐	☐

#	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition	Errors
1	IS&R	L1	803	(("345/442") or ("345/440") or ("345/421")).CCLS.	USPAT; EPO	2001/02/22 08:51			0
2	IS&R	L2	2798	(("716/18") or ("707/500") or ("707/104") or ("703/13") or ("703/22") or ("703/1")).CCLS.	USPAT; EPO	2001/02/22 08:55			0
3	BRS	L3	3585	1 or 2	USPAT; EPO	2001/02/22 08:55			0
4	BRS	L4	9	collaborative adj design	USPAT; EPO	2001/02/22 08:56			0
5	BRS	L5	608	(fabricator or manufacturer) near select$3	USPAT; EPO	2001/02/22 08:57			0
6	BRS	L6	0	4 and 5	EPO	2001/02/22 08:57			0
7	BRS	L7	617	4 or 5	USPAT; EPO	2001/02/22 08:57			0
8	BRS	L8	16	3 and 7	USPAT; EPO	2001/02/22 08:57			0

Document ID	Source	Issue Date	Pages	Title	Current OR Retrieval Classif
1	US 6041310 A	USPAT	20000321	31	Method and system for automobile transactions	705/27
2	US 6032145 A	USPAT	20000229	13	Method and system for database manipulation	707/5
3	US 6002855 A	USPAT	19991214	32	3-D spatial GUI for querying and manipulating an RDMS for order-entry applications	703/1
4	US 5995979 A	USPAT	19991130	32	Apparatus and method for selecting records from a computer database by repeatedly displaying search terms before either a list identifier or a search term is selected	707/104
5	US 5987474 A	USPAT	19991116	156	Computer aided maintenance and repair information system for equipment subject to regulatory compliance	707/104
6	US 5940082 A	USPAT	19990817	24	System and method for distributed collaborative drawing	345/442
7	US 5905507 A	USPAT	19990518	29	Compression of geometric models using spanning trees	345/440
8	US 5847971 A	USPAT	19981208	31	3-D spatial GUI querying and manipulating an RDMS for order-entry applications	703/1
9	US 5825369 A	USPAT	19981020	30	Compression of simple geometric models using spanning trees	345/440
10	US 5778381 A	USPAT	19980707	156	Computer aided maintenance and repair information system for equipment subject to regulatory compliance	707/104
11	US 5768581 A	USPAT	19980616	34	Apparatus and method for selecting records from a computer database by repeatedly displaying search terms from multiple list identifiers before either a list identifier or a search term is selected	707/104

	Current XRef	Inventor	U	S	C	P	1
1	705/1 ; 705/26 ; 707/104	Green, H. Dean, et al.	☐	☒	☐	☐	☐
2	705/26 ; 705/27 ; 707/104 ; 707/3	Beall, Christopher Wade, et al.	☒	☐	☐	☐	☐
3	705/26 ; 705/27	Ladner, Francis D., et al.	☒	☐	☐	☐	☐
4	707/102 ; 707/3 ; 707/4	Cochran, Nancy Pauline	☒	☐	☐	☐	☐
5	707/103	Sandifer, Michael A.	☒	☐	☐	☐	☐
6		Brinegar, David, et al.	☒	☐	☐	☐	☐
7		Rossignac, Jarek Jaroslaw Roman, et al.	☒	☐	☐	☐	☐
8		Ladner, Francis D., et al.	☒	☐	☐	☐	☐
9		Rossignac, Jarek Jaroslaw Roman, et al.	☒	☐	☐	☐	☐
10	701/29 ; 701/30 ; 707/103	Sandifer, Michael A.	☒	☐	☐	☐	☐
11	707/1 ; 701/10 ; 707/100 ; 707/102 ; 707/3 ; 707/4 ; 709/206	Cochran, Nancy Pauline	☒	☐	☐	☐	☐

Document ID	Source	Issue Date	Pages	Title	Current OR Retrieval Classif
12	US 5727164 A USPAT	19980310	33	Apparatus for and method of managing the availability of items	705/28
13	US 5680530 A USPAT	19971021	20	Graphical environment for interactively specifying a target system	345/440
14	US 5563988 A USPAT	19961008	132	Method and system for facilitating wireless, full-body, real-time user interaction with a digitally represented visual environment	345/421
15	US 5541849 A USPAT	19960730	46	Method and system for creating and validating low level description of electronic design from higher level, behavior-oriented description, including estimation and comparison	716/18
16	US 5504637 A USPAT	19960402	17	Apparatus for automated machinery component selection	700/95

Current XRef	Inventor	U	S	C	P	I
12	705/29 ; 707/104	Kaye, Eugene G. , et al.	☒	☐	☐	☐	☐
13	345/335 ; 345/349	Selfridge, Peter Gilman , et al.	☒	☐	☐	☐	☐
14	345/473	Maes, Pattie E. , et al.	☒	☐	☐	☐	☐
15	716/19 ; 716/5	Rostoker, Michael D. , et al.	☒	☐	☐	☐	☐
16	703/1	Wolf, Mike	☐	☒	☐	☐	☐

	Type	Hits	Search Text	DBs	Time Stamp
1	IS&R	2	("5724508").PN.	USPAT; EPO	2001/02/21 15:40
2	IS&R	2	("5293619").PN.	USPAT; EPO	2000/11/09 10:33
3	BRS	1	vendor same rfp	USPAT; EPO	2000/11/09 10:35
4	BRS	699	vendor$ same (rfp or request for proposal)	USPAT; EPO	2000/11/09 10:36
5	BRS	233231	network	USPAT; EPO	2000/11/09 10:36
6	BRS	200	(vendor$ same (rfp or request for proposal)) same network	USPAT; EPO	2000/11/09 10:37
7	BRS	7672	cad	USPAT; EPO	2000/11/09 10:37
8	BRS	4	((vendor$ same (rfp or request for proposal)) same network) and cad	USPAT; EPO	2000/11/09 10:37

	U	1	Document ID	Issue Date	Pages	Title	Current OR
1	☐	☐	US 5452239 A	19950919	131	Method of removing gated clocks from the clock nets of a netlist for timing sensitive implementation of the netlist in a hardware emulation system	703/19
2	☐	☐	US 5586254 A	19961217	119	System for managing and operating a network by physically imaging the network	714/25
3	☐	☐	US 5999908 A	19991207	91	Customer-based product design module	705/1
4	☐	☐	US 6134557 A	20001017	11	Materials and supplies ordering system	707/102

#	Current XRef	Retrieval Classif	Inventor	S	C	P
1	714/725 ; 716/17		Dai, Wei-Jin , et al.	☒	☐	☐
2	340/825.03 ; 707/104 ; 709/223 ; 714/43		Kondo, Mariko , et al.	☒	☐	☐
3	434/118 ; 705/10 ; 705/7		Abelow, Daniel H.	☒	☐	☐
4	707/104		Freeman, Craig	☒	☐	☐

09/239256

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L6   ANSWER 1 OF 2   PROMT   COPYRIGHT 2000 Gale Group

AN   2000:161537   PROMT
TI   Tools for Web Collaboration.(Technology Information)
AU   Kempfer, Lisa
SO   Computer-Aided Engineering, (April 1999) Vol. 18, No. 4, pp. 38.
     ISSN: 0733-3536.
PB   Penton Media, Inc.
DT   Newsletter
LA   English
WC   3133
TX   The ability to access and collaborate on design data--the heart of
     mechanical engineering environments--any where, any time is key to
     successful product launches. Ubiquitous access to data allows engineers
to
     reduce product development cycles, improve quality, and achieve the
     powerful position of being first to market.

       A variety of new, Web-based engineering tools are making close
     collaboration and reduced product cycle times a reality. By maximizing
Web
     and Java technology, this class of software enables users to easily and
     intuitively access and collaborate on design data.

       Larger companies are leading the charge, says Kelley Perey, director of
     Technical Markets at Sun Microsystems. Sun is the developer of Java, the
     open programming language that is the backbone of many Web browsers and
     software designed to be used over the Web.

       "Design complexity and large data sets are going to drive companies to
     use Web-based applications," Perey predicts. "They are going to have no
     other choice." The use of Web-based tools is widening. Perey says she
sees
     a "trickle-down" effect--suppliers of large companies are starting to use
     Web tools to communicate with the big firms they support as well as other
     engineers and suppliers.

       Since there is a spectrum of users, there is also a variety of Web
     collaboration software on the market. Each one offers different types of
     functions for different types of applications. Several years ago, product
     data management (PDM) vendors introduced the Web to engineers by
     adding Webfront ends to their products, making them much easier to use.
     Finally, aided by the Web, PDM information was being delivered
     in a format that each different class of user was able to understand.

       Now, there are packages focused on delivering CAD/design data in a
     similar usable fashion to all the members of a product development team.
     This software seems to fall into a few broad categories: design
     development collaboration, CAD collaboration, visualization, and project
     management.

       Design Collaboration

One of the big ● ling blocks with collaborati●) the Web with 3D
·is
bandwidth. CAD files are too big and the bandwith too small to
allow solid models to flow rapidly across networks. A few
companies, including Adaptive Media and RealityWave, are hoping to solve
that problem through large-model streaming technology.

Deven Kalra, chief technology officer at Adaptive Media, explains,
"Rather than trying to create faster and faster rendering engines ..., a
smarter approach is to reduce the data that is given to the rendering
engines." His company has done this with its Envision 3D product.

Envision 3D enables the distribution of highly complex 3D model design
across networks by employing object simplification and real-time culling
technologies. Object simplification changes an object's representation
into one with fewer data points, while meeting the user's need for a
particular level of detail. This results in faster rendering and speedier
network transfers, at the expense of geometric or visual precision.
Real-time culling determines which parts or objects must be rendered for
the current view, so that unseen portions are not even submitted to the
rendering facility.

These technologies allow users to easily visualize large models over an
extended enterprise on minimally equipped PCs. Using Envision 3D's
dimensioning capability, assemblies and parts can be checked for
interference or collision. Dimensioning and measurement of edges, faces,
arcs, points, objects, and assemblies are supported. Models can also be
annotated and marked up.

"Our design teams are in many locations around the world and we needed
an application that would allow us to collaborate in a timely and
productive manner," says Bill Olmsted, manager of Computer Integrated
Engineering at Jacobs Engineering. "After looking at other alternatives
on
the market, we found that Envision 3D was the only solution that offered
the performance and scalability we required, enabling our teams to
cost-effectively take delays out of the design process. Reduced delays
improves the bottom line for both us and our clients."

RealityWave's Concept module also uses streaming technology to allow a
CAD designer and one or more customers using standard office PCs to view
the same 3D CAD model on their computers while they discuss the model
over
the telephone. Any change the designer makes to the model during the
discussion is transmitted in real time to the other collaborators.

By using RealityWave Concept, Fabri-Kal, a plastic packaging
thermoformer, expects to reduce the time to design rigid-plastic
containers for a major food supplier from four weeks to hours.

Collaborating in real time, engineer to engineer, over the Web is now
possible using OneSpace from CoCreate Software. It is a CAD independent
software that allows participants in a collaborative session to make
changes to a model. Fisher Controls International Inc., a manufacturer of
regulators and valves, is using OneSpace for real-time collaboration
between its Marshalltown, IA facility and its European design center. The
European design center is responsible for localizing U.S. designs for
manufacture in Europe using regional suppliers. Use of the software is
already reducing its cycle times. Fisher Controls cites an example of
where a job that normally would have taken a week to complete through
E-mail or normal mail was completed in two collaboration sessions of 15
min each.

"Because everyone is working off the same model," explains Robert

Christenson, the project lead FCS Technology f‑ ‑sher
Controls, "we ar ‑‑‑ to avoid costly design mis and to promote
better communication across our distributed design groups as well as
realize significant cost savings through reduced travel expenses. The
very
first time one of our analysts used the software, he was able to
accomplish in a 15- to 20-min session what we had not been able to
accomplish in three weeks."

CoCreate reports OneSpace has been used for detecting collisions,
aesthetic considerations, catching major interpretive errors, and supply
chain collaboration. OneSpace 3.0 has a client/server architecture, and
on-line sessions can be started by dragging and dropping file names from
the browser into the application window.

Sometimes, pictures don't tell the whole story about what needs to be
reviewed or changed on a solid model. To improve communication among
individuals and project teams, InfoCast LLC offers eTEAM 1.0. It is
software that captures voice, images, and text.

Engineers can capture CAD files and vocally record their comments about
the images. Any file related to the issue can be attached as the user
speaks. The result is a personalized message with synchronized images,
markups, and voice that can be sent to team members. The receiving party
can reply to the original message with his own images, markups, and
voice.

"For engineers working in project teams spread across the country,
eTEAM
provides a viable technology to aid us in our communication about complex
design problems," says Kim Kelley, director of Customer Support
Operations
at Mentor Graphics, a leading provider of electronic design software.
"Imagine trying to describe to a customer over the phone which component
is failing in a 100M transistor design; it's time consuming and our
customers don't have time to spare. In electronic design, markets are won
or lost in days. The eTEAM capability of capturing design images and
annotating where an exact problem occurs represents huge time savings."

Another tool available for collaboration anywhere, anytime is ReviewIt
from Cubus Corp. The software is said to directly integrate visuals,
graphics, and their associated annotations with user message discussion.
The ReviewIt work screen allows users to mark up a drawing and discuss
design intent on a single screen.

Zaitrarrio Collier, director of engineering at Cubus, says two patented
technologies are at the core of the software. "When you are in ReviewIt's
design and review environment, you will see a drawing or image on the
left
and a place to leave a message or discussion on the right. Both of these
appear on a single screen." Together, he explains, the patented
technologies of context preservation and graphical indexing allow users
to
highlight an area of the drawing with annotation tools and directly
associate that annotation and view of the drawing with a personal
message.

Visualization Collaboration

It simply takes less time to explain something to someone if you show
them a picture or better yet, an animation. Immersive Design knows this.
Its mission is enterprise-wide product communication. Its Interactive
Product Animator (IPA) 5.0, a mechanical visualization and animation
package, addresses the need to share information across product design,

development, cre──⬤──marketing, finance, sales, ⬤──ervice. Currently,
IPA can be used ──⬤──animate solid models created i ⬤──ametric Technology
Corp.'s Pro/ENGINEER, Unigraphics Solutions' Solid Edge, SDRC's I-DEAS
Master Series, and SolidWorks Corp.'s SolidWorks, among others.

Electroglas Inc., a manufacturer of wafer-probing solutions, starting
using IPA in 1996 in an effort to improve design efficiency and
communication. IPA translates Electroglas' complex prober engine designs
into Microsoft Windows Audio Video Interleaved (AVI) files that can be
viewed from any desktop PC, enhancing both cross-department communication
and the input review process. These AVI files are then sent via E-mail to
anyone who needs input on the design process.

"In our review meeting," says Michael Brennan, a designer/ drafter at
Electroglas, "we're able to lead the different departments through the
designs in 3D with rotating animation. We've cut hours out of our review
meetings while making them more fluid and informative for all involved.
The AVI allows the entire team to participate in the design process."

IPA animations are said to be easy to create. Mike Dolan, president of
the design firm, Choice Designs Inc. is a user and reseller of IPA. He
says renderings are "quick and easy to create." To get started, the
learning curve is a matter of hours. However, Dolan adds, it may take two
to three weeks to produce high-quality, photorealistic output with the
higher-end version of the software.

The animations created allow users to see the design from 360 degrees
and shows how different pieces of the design assemble, interact, and
function. The translucent option can be used to reveal internal
components
in order to study functionality and determine accuracy. Another area IPA
is useful for, Dolan says, is animating parts and assemblies inside of
PDM software. "PDM is a boring tool," he says. "People
use PDM mainly because they want to be ISO compliant. IPA takes
some of the 'must do' out of PDM." The software, he explains,
improves the communication of PDM data in that it can show the
form, fit, and function of parts and assemblies.

Established mechanical CAD visualization software companies like
Engineering Animation Inc. (EAI) provide Web functionality for
collaborative work.

EAI says its VisView Web is a viewing tool that provides users with the
ability to access almost any type of drawings or documents through the
Internet or a company's intranet. Some of its highlights include the
ability to view more than 20 standard file formats; a right-mouse pop-up
or the keyboard can be used to control view actions; pages can be rotated
in 90-degree increments; and there are Java applets for rotate, mirror,
and focus. In addition, users can maneuver through multiple-page TIFF,
HP-GL, and other files page by page, or first, last, or next page.

Managing Projects

Project management is essential to successful product development.
There
needs to be software that tracks who is doing what and when and is it
finished yet? Project management software that is accessible over the Web
is becoming an essential tool for many companies.

There is a growing trend toward virtual design and engineering firms in
cyberspace. These firms need Web-based project management tools. Just ask
Mark Wheeler, president of Tri-Cycle Product Design, a three-person
industrial design and mechanical engineering company. The company focuses
on design projects in the solar and semiconductor process machinery,

semiconductor, f⬤ 're design, and high-tech cor⬤ ¦ product
industries. The ⬤pany depends on subcontractors

Recognizing that a project Web site was the best way to manage its
projects, but not having the time or resources to create its own site,
Tri-Cycle turned to Aspects Sitebuilder software from Framework
Technologies Corp.

"Our clients know we work on a managed-subcontractor basis, with
Tri-Cycle Product Design assuming all product development management
responsibility. Considering many of the folks we work with also work
full-time jobs elsewhere, we can effectively put in up to five man-weeks
per week on projects using ActiveProject Web Sites.

Web sites built with ActiveProject tools allow users to sign out and
work on a project while at the same time clients can view the files on a
read-only basis.

ActiveProject 4.0 users can perform design reviews directly using the
software's integrated commenting and on-line review features. Information
published to an ActiveProject Web site, its publication history, and any
associated comments are automatically managed and maintained by the
system. Users can mark up drawings using their Web browsers, and save
these markups to the project site. The software automatically manages the
relationship between any markup comments and the version of the
drawing/document they were made against.

Users can request information directly from other project participants,
while maintaining a complete record of both requests and responses. A
complete log and archive of all information requests are maintained
automatically via the company's project Web site.

A new rising star in the field of Web-based product/project team
collaborative software companies is NexPrise Inc., a spin-off of Lockheed
Martin. It offers its ipTeam 2.0 Suite, which provides development teams
with a dedicated, secure Internet-based project area hosting all aspects
of a team's activity. It facilitates the capture, organization, and
dissemination of product development information, including documents,
messages, design rationale, multimedia objects, supplier knowledge, and
events. The Suite also provides team administration tools, message
handling and multilevel security protection.

A highlight of the ipTeam Suite is an Internet Notebook, an electronic
engineering notebook. It captures free-form drawing, audio, text, and
snapshots of CAD drawings. The Notebook is also able to link objects,
images, documents, and Web sites into cohesive material for the team. The
information captured in the Notebook is accessible through a
sophisticated
search capability as well as publish and subscribe tools for managing the
dissemination of the information.

The Suite includes the ipTeam Internet Workbench, a general
project-centric framework; the Document Vault, a document management
system; the Tracking Center, a module for tracking the progress of the
team against milestones and interdependencies; the Procurement Center, a
request for procurement (RFP) negotiation module; and the
Supplier Center, a Java-based module for capturing and organizing
knowledge on preferred suppliers.

CAE LINKS

Adaptive Media -- www.adaptivemedia.com
RealityWave -- www.realitywave.com
CoCreate -- www.cocreate.com

InfoCast -- www ● \.net
Cubus -- www.cuL ●...ec
Immersive Design -- www.immdesign.com
Choice Designs -- www.ezchoice.com
EAI -- www.eai.com
Framework -- www.frametech.com
NexPrise -- www.nexprise.com

PDM on the Web

According to Ed Miller, president of CIMdata Inc., a consulting firm specializing in PDM and CAD/CAM, "Web technology has had a rapid, major impact on PDM and continues to exert a tremendous influence on the way systems are developed and implemented." In fact, he explains, many user companies have internally developed Web connections for their PDM systems and are pressuring vendors for increased capabilities.

Miller says all major PDM vendors feel this demand and have created focused programs to include browser technology in their products. "Some vendors have already extended their capabilities beyond the initial one-way, view-only interfaces and have developed impressive new Web-enabled user interfaces that provide access to full system functionality. Work is also underway on capabilities for hooking PDM browsers into the Internet to access on-line commercial databases and also enable dispersed users to easily share information."

For instance, Structural Dynamics Research Corp.'s (SDRC's) e!Vista product is a Java-based front end to the Metaphase Enterprise PDM system. It allows companies to gather, manage, and share information via the Internet. With e!Vista, all of the PDM functionality of Metaphase Enterprise can be customized and delivered to any user equipped with a Web browser.

Parametric Technology Corp.'s (PTC's) Windchill PDM supports managing and communicating information about product structures and changes throughout product life cycles. This software was entirely written
in Java on both the client and server side. Windchill PDM appears as Web pages within a commercial Web browser that provides access to Java applets, search engines, universal resource locators (URLs), E-mail integration, upload/download servers, integration with plug-in and helper applications, and the ability to hyperlink and navigate information
across supplier and partner databases.

A Web tool in the document management arena is Intranet Docs from Xerox Engineering Systems. Intranet Docs provides enterprise-wide access to thousands of documents loaded on an Intranet Docs server. Using a standard
Web browser and network access, engineers can quickly search for and view engineering and large-format documents--at any time, location, and on any computer platform. Users can build and distribute document sets and send ViewMark URL document links instead of file attachments. A revision control feature lets viewers know there is an updated version of the document. A red X is displayed on the document that can be clicked to bring up the updated document.

CAE LINKS

CIMdata -- www.CIMdata.com
SDRC -- www.sdrc.com
PTC -- www.windchill.com
Xerox -- www.xerox.com

CAD vendors are also starting to integrate standard Web
technology into their design and drafting software. Dassault Systemes
started a few years ago with it CATIA Network Computing
Solutions (CATweb) module.

Phil Harrison, design manager at Standard Motor Products, a CATIA user,
says his company's use of Dassault Version 2.1 has made its CATIA data
more usable. "CATweb has allowed us to open up access to our CATIA data
to
manufacturing locations, purchasing, and suppliers," he explains.
"Response time is such that users often do not realize that the data they
are viewing is not located on their own workstation."

Dassault says its new CATweb Navigator Version 2 Release 2 offers
high-speed and low-cost Web navigation tools to explore native
engineering
data over the Web. It can access configured product structured data from
Enovia's ENOVIAVPM PDM system. It allows downloading of multiple
3D models and 2D drawings on the client machine, while providing new
annotation capabilities. Using CATweb Space and CATweb Publish, the user
also benefits from new functions for advanced measurement and analysis on
exact geometry, section cut (with immediate 2D visualization) and Web
site
publication.

The Web is also infiltrating low-cost CAD. IMSI's recently released
TurboCAD 6 offers a new Internet Palette. This capability is based on new
Front Line (or Impression Layer) technology created by IMSI which
integrates Web browsing into software applications. It connects users to
IMSI's TurboCAD. com Web site via the Internet every time the application
is opened--providing users with CAD-related content, upgrades, technical
assistance, file hosting, and access to other on-line users and sites.

CAE LINKS

Dassault -- www.dsweb.com
Enovia-- www.enovia.com
IMSI -- www.imsisoft.com

Lisa Kempfer is Associate Editor of Computer-Aided ENGINEERING.3

CT   *PC7372431 CAD/CAM/CIM/CAE Software; PC3573036 CAD/CAM/CIM Computer
      Systems
CC   *EC310 Science & research
ICL   *BUSN Any type of business; CMPT Computers and Office Automation
NAIC *51121 Software Publishers; 334111 Electronic Computer Manufacturing
GT   *CC1USA United States

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(FILE 'HOME' ENTERED AT 13:24:59 ON 07 NOV 2000)

FILE '1MOBILITY, 2MOBILITY, AEROSPACE, APILIT, APIPAT, BIOTECHNO, CEN,
CIN, COMPENDEX, CONFSCI, DKF, DKILIT, ELCOM, ENERGY, ENTEC, EUROPATFULL,
GEOREF, HEALSAFE, IFIPAT, INSPEC, INSPHYS, ISMEC, ITRD, JICST-EPLUS,
MDF,

ENTER DISPLAY FORMAT (IBIB):all

L6   ANSWER 1 OF 2   PROMT   COPYRIGHT 2000 Gale Group

AN   2000:161537   PROMT
TI   Tools for Web Collaboration.(Technology Information)
AU   Kempfer, Lisa
SO   Computer-Aided Engineering, (April 1999) Vol. 18, No. 4, pp. 38.
      ISSN: 0733-3536.
PB   Penton Media, Inc.
DT   Newsletter
LA   English
WC   3133
TX   The ability to access and collaborate on design data--the heart of
      mechanical engineering environments--any where, any time is key to
      successful product launches. Ubiquitous access to data allows engineers
to
      reduce product development cycles, improve quality, and achieve the
      powerful position of being first to market.

         A variety of new, Web-based engineering tools are making close
      collaboration and reduced product cycle times a reality. By maximizing
Web
      and Java technology, this class of software enables users to easily and
      intuitively access and collaborate on design data.

         Larger companies are leading the charge, says Kelley Perey, director of
      Technical Markets at Sun Microsystems. Sun is the developer of Java, the
      open programming language that is the backbone of many Web browsers and
      software designed to be used over the Web.

         "Design complexity and large data sets are going to drive companies to
      use Web-based applications," Perey predicts. "They are going to have no
      other choice." The use of Web-based tools is widening. Perey says she
sees
      a "trickle-down" effect--suppliers of large companies are starting to use
      Web tools to communicate with the big firms they support as well as other
      engineers and suppliers.

         Since there is a spectrum of users, there is also a variety of Web
      collaboration software on the market. Each one offers different types of
      functions for different types of applications. Several years ago, product
      data management (PDM) vendors introduced the Web to engineers by
      adding Webfront ends to their products, making them much easier to use.
      Finally, aided by the Web, PDM information was being delivered
      in a format that each different class of user was able to understand.

         Now, there are packages focused on delivering CAD/design data in a
      similar usable fashion to all the members of a product development team.
      This software seems to fall into a few broad categories: design
      development collaboration, CAD collaboration, visualization, and project
      management.

         Design Collaboration

Christenson, the ⬤roject lead FCS Technology f⬤ sher
Controls, "we ar .b.e to avoid costly design mis t and to promote
better communication across our distributed design groups as well as
realize significant cost savings through reduced travel expenses. The
very
first time one of our analysts used the software, he was able to
accomplish in a 15- to 20-min session what we had not been able to
accomplish in three weeks."

CoCreate reports OneSpace has been used for detecting collisions,
aesthetic considerations, catching major interpretive errors, and supply
chain collaboration. OneSpace 3.0 has a client/server architecture, and
on-line sessions can be started by dragging and dropping file names from
the browser into the application window.

Sometimes, pictures don't tell the whole story about what needs to be
reviewed or changed on a solid model. To improve communication among
individuals and project teams, InfoCast LLC offers eTEAM 1.0. It is
software that captures voice, images, and text.

Engineers can capture CAD files and vocally record their comments about
the images. Any file related to the issue can be attached as the user
speaks. The result is a personalized message with synchronized images,
markups, and voice that can be sent to team members. The receiving party
can reply to the original message with his own images, markups, and
voice.

"For engineers working in project teams spread across the country,
eTEAM
provides a viable technology to aid us in our communication about complex
design problems," says Kim Kelley, director of Customer Support
Operations
at Mentor Graphics, a leading provider of electronic design software.
"Imagine trying to describe to a customer over the phone which component
is failing in a 100M transistor design; it's time consuming and our
customers don't have time to spare. In electronic design, markets are won
or lost in days. The eTEAM capability of capturing design images and
annotating where an exact problem occurs represents huge time savings."

Another tool available for collaboration anywhere, anytime is ReviewIt
from Cubus Corp. The software is said to directly integrate visuals,
graphics, and their associated annotations with user message discussion.
The ReviewIt work screen allows users to mark up a drawing and discuss
design intent on a single screen.

Zaitrarrio Collier, director of engineering at Cubus, says two patented
technologies are at the core of the software. "When you are in ReviewIt's
design and review environment, you will see a drawing or image on the
left
and a place to leave a message or discussion on the right. Both of these
appear on a single screen." Together, he explains, the patented
technologies of context preservation and graphical indexing allow users
to
highlight an area of the drawing with annotation tools and directly
associate that annotation and view of the drawing with a personal
message.

Visualization Collaboration

It simply takes less time to explain something to someone if you show
them a picture or better yet, an animation. Immersive Design knows this.
Its mission is enterprise-wide product communication. Its Interactive
Product Animator (IPA) 5.0, a mechanical visualization and animation
package, addresses the need to share information across product design,

semiconductor, f⬤re design, and high-tech cor⬤ product
industries. The .pany depends on subcontractors

Recognizing that a project Web site was the best way to manage its projects, but not having the time or resources to create its own site, Tri-Cycle turned to Aspects Sitebuilder software from Framework Technologies Corp.

"Our clients know we work on a managed-subcontractor basis, with Tri-Cycle Product Design assuming all product development management responsibility. Considering many of the folks we work with also work full-time jobs elsewhere, we can effectively put in up to five man-weeks per week on projects using ActiveProject Web Sites.

Web sites built with ActiveProject tools allow users to sign out and work on a project while at the same time clients can view the files on a read-only basis.

ActiveProject 4.0 users can perform design reviews directly using the software's integrated commenting and on-line review features. Information published to an ActiveProject Web site, its publication history, and any associated comments are automatically managed and maintained by the system. Users can mark up drawings using their Web browsers, and save these markups to the project site. The software automatically manages the relationship between any markup comments and the version of the drawing/document they were made against.

Users can request information directly from other project participants, while maintaining a complete record of both requests and responses. A complete log and archive of all information requests are maintained automatically via the company's project Web site.

A new rising star in the field of Web-based product/project team collaborative software companies is NexPrise Inc., a spin-off of Lockheed Martin. It offers its ipTeam 2.0 Suite, which provides development teams with a dedicated, secure Internet-based project area hosting all aspects of a team's activity. It facilitates the capture, organization, and dissemination of product development information, including documents, messages, design rationale, multimedia objects, supplier knowledge, and events. The Suite also provides team administration tools, message handling and multilevel security protection.

A highlight of the ipTeam Suite is an Internet Notebook, an electronic engineering notebook. It captures free-form drawing, audio, text, and snapshots of CAD drawings. The Notebook is also able to link objects, images, documents, and Web sites into cohesive material for the team. The information captured in the Notebook is accessible through a sophisticated
search capability as well as publish and subscribe tools for managing the dissemination of the information.

The Suite includes the ipTeam Internet Workbench, a general project-centric framework; the Document Vault, a document management system; the Tracking Center, a module for tracking the progress of the team against milestones and interdependencies; the Procurement Center, a request for procurement (RFP) negotiation module; and the Supplier Center, a Java-based module for capturing and organizing knowledge on preferred suppliers.

CAE LINKS

Adaptive Media -- www.adaptivemedia.com
RealityWave -- www.realitywave.com
CoCreate -- www.cocreate.com

CAD vendors are also starting to integrate standard Web technology into their design and drafting software. Dassault Systemes started a few years ago with it CATIA Network Computing Solutions (CATweb) module.

Phil Harrison, design manager at Standard Motor Products, a CATIA user, says his company's use of Dassault Version 2.1 has made its CATIA data more usable. "CATweb has allowed us to open up access to our CATIA data to manufacturing locations, purchasing, and suppliers," he explains. "Response time is such that users often do not realize that the data they are viewing is not located on their own workstation."

Dassault says its new CATweb Navigator Version 2 Release 2 offers high-speed and low-cost Web navigation tools to explore native engineering data over the Web. It can access configured product structured data from Enovia's ENOVIAVPM PDM system. It allows downloading of multiple 3D models and 2D drawings on the client machine, while providing new annotation capabilities. Using CATweb Space and CATweb Publish, the user also benefits from new functions for advanced measurement and analysis on exact geometry, section cut (with immediate 2D visualization) and Web site publication.

The Web is also infiltrating low-cost CAD. IMSI's recently released TurboCAD 6 offers a new Internet Palette. This capability is based on new Front Line (or Impression Layer) technology created by IMSI which integrates Web browsing into software applications. It connects users to IMSI's TurboCAD. com Web site via the Internet every time the application is opened--providing users with CAD-related content, upgrades, technical assistance, file hosting, and access to other on-line users and sites.

CAE LINKS

Dassault -- www.dsweb.com
Enovia-- www.enovia.com
IMSI -- www.imsisoft.com

Lisa Kempfer is Associate Editor of Computer-Aided ENGINEERING.3

CT   *PC7372431 CAD/CAM/CIM/CAE Software; PC3573036 CAD/CAM/CIM Computer Systems
CC   *EC310 Science & research
ICL   *BUSN Any type of business; CMPT Computers and Office Automation
NAIC *51121 Software Publishers; 334111 Electronic Computer Manufacturing
GT   *CC1USA United States

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(FILE 'HOME' ENTERED AT 13:24:59 ON 07 NOV 2000)

FILE '1MOBILITY, 2MOBILITY, AEROSPACE, APILIT, APIPAT, BIOTECHNO, CEN, CIN, COMPENDEX, CONFSCI, DKF, DKILIT, ELCOM, ENERGY, ENTEC, EUROPATFULL, GEOREF, HEALSAFE, IFIPAT, INSPEC, INSPHYS, ISMEC, ITRD, JICST-EPLUS, MDF,

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| Help | Logout | Interrupt |

| Main Menu | Search Form | Posting Counts | Show S Numbers | Edit S Numbers | Preferences |

Search Results -

Terms	Documents
12 same 13	6

Database:
- US Patents Full-Text Database
- JPO Abstracts Database
- EPO Abstracts Database
- Derwent World Patents Index
- IBM Technical Disclosure Bulletins

Refine Search: `12 same 13`   Clear

Search History

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DB Name	Query	Hit Count	Set Name
USPT,JPAB,EPAB,DWPI,TDBD	12 same 13	6	L4
USPT,JPAB,EPAB,DWPI,TDBD	cad	15195	L3
USPT,JPAB,EPAB,DWPI,TDBD	pdm	2113	L2
USPT,JPAB,EPAB,DWPI,TDBD	nicecad	0	L1

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Search Results - Record(s) 1 through 6 of 6 returned.

☐ 1. Document ID: US 6139833 A

L4: Entry 1 of 6   File: USPT   Oct 31, 2000

US-PAT-NO: 6139833
DOCUMENT-IDENTIFIER: US 6139833 A
TITLE: Targeted gene discovery

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐ 2. Document ID: US 6039897 A

L4: Entry 2 of 6   File: USPT   Mar 21, 2000

US-PAT-NO: 6039897
DOCUMENT-IDENTIFIER: US 6039897 A
TITLE: Multiple patterned structures on a single substrate fabricated by elastomeric micro-molding techniques

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐ 3. Document ID: US 5272641 A

L4: Entry 3 of 6   File: USPT   Dec 21, 1993

US-PAT-NO: 5272641
DOCUMENT-IDENTIFIER: US 5272641 A
TITLE: Parts insertion machine control system

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐ 4. Document ID: JP 2000113007 A

L4: Entry 4 of 6   File: JPAB   Apr 21, 2000

PUB-NO: JP02000113007A
DOCUMENT-IDENTIFIER: JP 2000113007 A
TITLE: SYSTEM AND METHOD FOR LINKING CAD/PDM AND COMPUTER- READABLE RECORDING MEDIUM RECORDING CAD/PDM LINKING PROGRAM

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐ 5.   Document ID: JP 11191095 A

L4: Entry 5 of 6   File: JPAB   Jul 13, 1999

PUB-NO: JP411191095A
DOCUMENT-IDENTIFIER: JP 11191095 A
TITLE: INTEGRATED CAE SYSTEM

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Clip Img | Image |

☐ 6.   Document ID: JP 2000113007 A

L4: Entry 6 of 6   File: DWPI   Apr 21, 2000

DERWENT-ACC-NO: 2000-354964
DERWENT-WEEK: 200031
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TITLE: CAD and PDM cooperation system, has CAD data registration unit to
store different data format of CAD data into PDM system

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Clip Img | Image |

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Terms	Documents
12 same 13	6

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L1: Entry 4 of 6   File: JPAB   Apr 21, 2000

PUB-NO: JP02000113007A
DOCUMENT-IDENTIFIER: JP 2000113007 A
TITLE: SYSTEM AND METHOD FOR LINKING CAD/PDM AND COMPUTER- READABLE RECORDING MEDIUM RECORDING CAD/PDM LINKING PROGRAM

PUBN-DATE: April 21, 2000

INVENTOR-INFORMATION:

NAME	COUNTRY
MURAKAMI, YOSHIO	N/A

ASSIGNEE-INFORMATION:

NAME	COUNTRY
TOSHIBA CORP	N/A

APPL-NO: JP10277623
APPL-DATE: September 30, 1998

INT-CL (IPC): G06F 17/50

ABSTRACT:

PROBLEM TO BE SOLVED: To provide a CAD/PDM linking system capable of providing a concurrent engineering by linking plural kinds of CAD systems and PDM system.

SOLUTION: This CAD/PDM linking system is provided with plural kinds of CAD systems 11-1n, local disks 21-2n belonging to the respective CAD systems, PDM system 3, data base (D/B) 4 belonging to the PDM system 3, CAD/PDM interface part 5 for controlling the exchange of data between the CAD system and PDM system, disk 6 for I/F belonging to the CAD/PDM interface part 5, model registration request table 7, object model managing table 8 and attached information transforming table 9. The model data or configuration tree information of plural kinds of CAD systems 11-1n in different data formats are transformed to the data format of the PDM system 3 and registered in the PDM system 3 so that the PDM system 3 can totally manage plural kinds of CAD system 11-1n.

WEST

☐ | Generate Collection |

L1: Entry 5 of 6   File: JPAB   Jul 13, 1999

PUB-NO: JP411191095A
DOCUMENT-IDENTIFIER: JP 11191095 A
TITLE: INTEGRATED CAE SYSTEM

PUBN-DATE: July 13, 1999

INVENTOR-INFORMATION:

NAME	COUNTRY
SHIYOUI, SHINICHI	N/A
YAGAWA, MOTOKI	N/A
YOSHIMURA, SHINOBU	N/A
AKIBA, HIROSHI	N/A

INT-CL (IPC): G06F 15/16

ABSTRACT:

PROBLEM TO BE SOLVED: To enable integration of CAD and CAM and expansion to PDM
(product data management) by making abstract CAE(computer-aged engineering)
system software concepts in decentralized environment and making a
communication between subsystems by message passing using TCP/IP as the
standard protocol of a communication between computers.

SOLUTION: The whole system including a CAD and a CAM system is generally named
'universe' and the CAD and CAE systems in it are named 'one galactic system'.
Galactic systems A to D consists of several 'galaxys' (1) to (4). Communication
in and between the galaxys and between the galactic systems are performed by
the message passing of TCP/IP sockets.

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End of Result Set

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L1: Entry 6 of 6   File: DWPI   Apr 21, 2000

DERWENT-ACC-NO: 2000-354964
DERWENT-WEEK: 200031
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TITLE: CAD and PDM cooperation system, has CAD data registration unit to store different data format of CAD data into PDM system

PATENT-ASSIGNEE:

ASSIGNEE	CODE
TOSHIBA KK	TOKE

PRIORITY-DATA:
1998JP-0277623   September 30, 1998

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 2000113007	April 21, 2000	N/A	008	G06F017/50 A

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-NO
JP2000113007A	September 30, 1998	1998JP-0277623	N/A

INT-CL (IPC): G06F 17/50

ABSTRACTED-PUB-NO: JP2000113007A
BASIC-ABSTRACT:

NOVELTY - A model data and a component tree information corresponding to different data format are converted into a respective data format of PDM system on the same are stored in PDM system.

USE - For control and designing applications in electrical machinery manufacturing facility.

ADVANTAGE - Facilitates concurrent management of both the systems. Enables PDM system to recognize the latest processing condition of CAD system and content of each CAD data.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of CAD-PDM cooperation system.

CHOSEN-DRAWING: Dwg.1/7

TITLE-TERMS: CAD PDM COOPERATE SYSTEM CAD DATA REGISTER UNIT STORAGE DATA FORMAT CAD DATA PDM SYSTEM

DERWENT-CLASS: T01

EPI-CODES: T01-J07B; T01-J15X;

SECONDARY-ACC-NO:
Non-CPI Secondary Accession Numbers: N2000-266068

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Derwent World Patents Index
IBM Technical Disclosure Bulletins

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USPT,JPAB,EPAB,DWPI,TDBD	110 and 13	0	L11
USPT,JPAB,EPAB,DWPI,TDBD	17 same 19	55	L10
USPT,JPAB,EPAB,DWPI,TDBD	network	421455	L9
USPT,JPAB,EPAB,DWPI,TDBD	12 and 17	0	L8
USPT,JPAB,EPAB,DWPI,TDBD	16 or 15	498	L7
USPT,JPAB,EPAB,DWPI,TDBD	rfp	406	L6
USPT,JPAB,EPAB,DWPI,TDBD	request near proposal	114	L5
USPT,JPAB,EPAB,DWPI,TDBD	12 same 13	6	L4
USPT,JPAB,EPAB,DWPI,TDBD	cad	15195	L3
USPT,JPAB,EPAB,DWPI,TDBD	pdm	2113	L2
USPT,JPAB,EPAB,DWPI,TDBD	nicecad	0	L1

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L1          0 S NICE
L2      39212 S RFP OR REQUEST FOR PROPOSAL
L3      19770 S CAD (P) NETWORK
L4         33 S L2 AND L3
L5      17546 S PDM
L6          2 S L5 AND L4
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JPO Abstracts Database
EPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Refine Search: l10 and l11 | Clear |

Search History

Today's Date: 11/9/2000

DB Name	Query	Hit Count	Set Name
USPT,JPAB,EPAB,DWPI,TDBD	l10 and l11	11	L12
USPT,JPAB,EPAB,DWPI,TDBD	collaborat$3	6351	L11
USPT,JPAB,EPAB,DWPI,TDBD	l9 and l2	177	L10
USPT,JPAB,EPAB,DWPI,TDBD	l3 same l4	28329	L9
USPT,JPAB,EPAB,DWPI,TDBD	l7 and l3	2	L8
USPT,JPAB,EPAB,DWPI,TDBD	l1 same l2	6	L7
USPT,JPAB,EPAB,DWPI,TDBD	l1 sme l2	20163	L6
USPT,JPAB,EPAB,DWPI,TDBD	l1 same l2 same l3 same l4	0	L5
USPT,JPAB,EPAB,DWPI,TDBD	rfp or (request for proposal)	255131	L4
USPT,JPAB,EPAB,DWPI,TDBD	network	421455	L3
USPT,JPAB,EPAB,DWPI,TDBD	CAD	15195	L2
DWPI,USPT,EPAB,JPAB,TDBD	PDM	2113	L1

WEST

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Search Results - Record(s) 1 through 10 of 11 returned.

LJ2

☐   1.   Document ID: US 6063128 A

L12: Entry 1 of 11   File: USPT   May 16, 2000

US-PAT-NO: 6063128
DOCUMENT-IDENTIFIER: US 6063128 A
TITLE: Object-oriented computerized modeling system

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image

---

☐   2.   Document ID: US 6061440 A

L12: Entry 2 of 11   File: USPT   May 9, 2000

US-PAT-NO: 6061440
DOCUMENT-IDENTIFIER: US 6061440 A
TITLE: Intelligent switching system for voice and data

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image

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☑   3.   Document ID: US 6035297 A

L12: Entry 3 of 11   File: USPT   Mar 7, 2000

US-PAT-NO: 6035297
DOCUMENT-IDENTIFIER: US 6035297 A
TITLE: Data management system for concurrent engineering

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image

---

☐   4.   Document ID: US 5987242 A

L12: Entry 4 of 11   File: USPT   Nov 16, 1999

US-PAT-NO: 5987242
DOCUMENT-IDENTIFIER: US 5987242 A
TITLE: Object-oriented computerized modeling system

Bartley
11/97

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image

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☐   5.   Document ID: US 5940082 A

L12: Entry 5 of 11   File: USPT   Aug 17, 1999

US-PAT-NO: 5940082
DOCUMENT-IDENTIFIER: US 5940082 A
TITLE: System and method for distributed collaborative drawing

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐ 6.   Document ID: US 5887170 A

L12: Entry 6 of 11   File: USPT   Mar 23, 1999

US-PAT-NO: 5887170
DOCUMENT-IDENTIFIER: US 5887170 A
TITLE: System for classifying and sending selective requests to different
participants of a collaborative application thereby allowing concurrent
execution of collaborative and non-collaborative applications

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☑ 7.   Document ID: US 5844979 A

L12: Entry 7 of 11   File: USPT   Dec 1, 1998

US-PAT-NO: 5844979
DOCUMENT-IDENTIFIER: US 5844979 A
TITLE: Intelligent switching system for voice and data

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐ 8.   Document ID: US 5815415 A

L12: Entry 8 of 11   File: USPT   Sep 29, 1998

US-PAT-NO: 5815415
DOCUMENT-IDENTIFIER: US 5815415 A
TITLE: Computer system for portable persistent modeling

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐ 9.   Document ID: US 5724508 A

L12: Entry 9 of 11   File: USPT   Mar 3, 1998

US-PAT-NO: 5724508
DOCUMENT-IDENTIFIER: US 5724508 A
TITLE: Apparatus for collaborative computing

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☑ 10.   Document ID: US 5701400 A

L12: Entry 10 of 11   File: USPT   Dec 23, 1997

US-PAT-NO: 5701400
DOCUMENT-IDENTIFIER: US 5701400 A
TITLE: Method and apparatus for applying if-then-else rules to data sets
in a relational data base and generating from the results of application
of said rules a database of diagnostics linked to said data sets to aid
executive analysis of financial data

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

Generate Collection

Terms	Documents
110 and 111	11

Display [10] Documents, starting with Document: [11]

Display Format: [   ]   Change Format

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Search Results - Record(s) 11 through 11 of 11 returned.

☑ 11.   Document ID: US 5293619 A

L12: Entry 11 of 11   File: USPT   Mar 8, 1994

US-PAT-NO: 5293619
DOCUMENT-IDENTIFIER: US 5293619 A
TITLE: Method and apparatus for collaborative use of application program

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image

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Terms	Documents
l10 and l11	11

Display   10 Documents, starting with Document: 11

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$L7$

Search Results - Record(s) 1 through 6 of 6 returned.

☐ 1. Document ID: US 6139833 A

L7: Entry 1 of 6   File: USPT   Oct 31, 2000

US-PAT-NO: 6139833
DOCUMENT-IDENTIFIER: US 6139833 A
TITLE: Targeted gene discovery

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐ 2. Document ID: US 6039897 A

L7: Entry 2 of 6   File: USPT   Mar 21, 2000

US-PAT-NO: 6039897
DOCUMENT-IDENTIFIER: US 6039897 A
TITLE: Multiple patterned structures on a single substrate fabricated by elastomeric micro-molding techniques

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐ 3. Document ID: US 5272641 A

L7: Entry 3 of 6   File: USPT   Dec 21, 1993

US-PAT-NO: 5272641
DOCUMENT-IDENTIFIER: US 5272641 A
TITLE: Parts insertion machine control system

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐ 4. Document ID: JP 2000113007 A

L7: Entry 4 of 6   File: JPAB   Apr 21, 2000

PUB-NO: JP02000113007A
DOCUMENT-IDENTIFIER: JP 2000113007 A
TITLE: SYSTEM AND METHOD FOR LINKING CAD/PDM AND COMPUTER- READABLE RECORDING MEDIUM RECORDING CAD/PDM LINKING PROGRAM
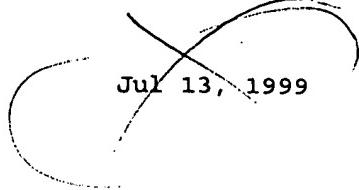
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

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L7: Entry 5 of 6   File: JPAB   Jul 13, 1999

PUB-NO: JP411191095A
DOCUMENT-IDENTIFIER: JP 11191095 A
TITLE: INTEGRATED CAE SYSTEM

PUBN-DATE: July 13, 1999

INVENTOR-INFORMATION:

NAME	COUNTRY
SHIYOUI, SHINICHI	N/A
YAGAWA, MOTOKI	N/A
YOSHIMURA, SHINOBU	N/A
AKIBA, HIROSHI	N/A

ASSIGNEE-INFORMATION:

NAME	COUNTRY
ALLIED ENGINEERING:KK	N/A

APPL-NO: JP09370199
APPL-DATE: December 25, 1997

INT-CL (IPC): G06F 15/16

ABSTRACT:

PROBLEM TO BE SOLVED: To enable integration of CAD and CAM and expansion to PDM
(product data management) by making abstract CAE(computer-aged engineering)
system software concepts in decentralized environment and making a
communication between subsystems by message passing using TCP/IP as the
standard protocol of a communication between computers.

SOLUTION: The whole system including a CAD and a CAM system is generally named
'universe' and the CAD and CAE systems in it are named 'one galactic system'.
Galactic systems A to D consists of several 'galaxys' (1) to (4). Communication
in and between the galaxys and between the galactic systems are performed by
the message passing of TCP/IP sockets.

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